

Grade: K – 6th

Time: 1 hour

Season: Spring, summer, fall

Tree Cycle and Rotten Log Critters

National Science Teaching Standards

A. Science as **INQUIRY**

B. **PHYSICAL** Science

C. **LIFE** Science

F. Science in **PERSONAL** and **SOCIAL PERSPECTIVE**

Objective:

- Using observation, students will be able to describe the life cycle of a tree.
- Students will record observations of animals found living in a rotten log.
- Students will understand all stages of life provide valuable habitat.
- Students will compare recycling in the forest with recycling at home and school.

Pre Activity:

- “Adopt a Tree” activity, *Iowa Supplements to Project Learning Tree*, pp.49-53.
- “Life Cycle of a Tree” activity, *Iowa Supplements to Project Learning Tree*, p. 71.

Equipment:

- critter identification cards
- bug boxes
- clipboards
- worksheets
- pencils

Procedure:

1. Meet at the stump outside the classroom.
2. Divide the students into groups of 2-3.
3. Pass out equipment.
4. Take the group to a wooded area where various aged trees will be found (i.e. seeds, seedling, sapling, mature trees, dead trees) Have students discover the various stages of the life cycle of a tree.
5. With younger students role play the stages first: roll up in a ball (seed); water and sunlight make it grow; grows to a sapling; gets branches (arms stretch out and up) and becomes a mature tree; blows in the wind (sway back and forth); decay hits and strong winds weaken the tree (droop shoulders); falls down totally(back to the ground).
6. Talk about one of the dead logs the students have found. Discuss what happens to a dead tree; is it of any importance to the rest of the forest community? Discuss what is meant by recycling. Ask how a dead log is like a recycling station?
7. Send the students back to their dead logs for a closer look and fill out the worksheet on the age of their tree.

8. Discuss with the group how a dead log is like an apartment building.
9. Send them back to the log to see what is living in their “apartment building.”
10. They can collect 1 specimen of life from their log and put in the bug box.
11. Fill out the other worksheet on their critter.
12. Come back to the stump and have students share what they collected.
13. After sharing, have students return critters to their homes.
14. Collect equipment.
15. Have students wash hands with soap and water.

Post Activity:

- Bring into your classroom samples of dead logs. Make slides of the things you find and view under the microscope.
- Write a poem about the log you investigated at Springbrook:
Line 1: 2 descriptive words
Line 2: 3 actions words
Line 3: 1 phrase that tells how the log affects the rest of the environment
Line 4: 1 word that sums up everything about the log
Now go back and give your poem a title!
Share your poems with the class.

Post Discussion:

- Would it be a good idea to “clean up” all of the dead logs and trees in the forest?
Explain
- How can a dead log/tree be beneficial to wildlife?
- What would happen to the critters living in the logs if there were no logs? Discuss the balance of nature.
- Discuss recycling in the forest. Discuss recycling in the classroom. Discuss recycling at home.